

Background Information on Use Attainability Analysis (UAA) in Maine

- **When may a UAA result in the removal or lowering of a designated use?**

A UAA may be used as the supporting basis to remove or lower a designated use if the analysis demonstrates that attaining the designated use is not feasible due to one or more of the factors at 40 CFR 131.10(g). Frequently, the basis for a downgrade will be that controls beyond the technology requirements of the CWA will cause substantial and widespread economic and social impact. **The analysis involves the assessment of alternatives, and their costs, that:**

- (1) provide for use attainment without a downgrade of designated uses, and**
- (2) provide the highest level of use attainment feasible, if a downgrade appears necessary.**

Both federal and Maine state regulations define a use attainability analysis (UAA) as “a structured scientific assessment of factors affecting the attainment” of the use which “may include physical, chemical, biological, and economic factors”. [40 CFR 131.3 (g); and 38 MRSA 466 (11-A)]. A UAA is required both under the Clean Water Act [40 CFR 131.10 (j)] and under Maine’s water quality standards [38 MRSA 464 (2-A)].

- **What information needs to be included in a UAA?**

1. Document current classification: Specify the water uses to be achieved and protected under the current classification and describe what represents attainment of the use goals.
2. Document which uses are “existing uses”. The identification of “existing uses” is important because States may not remove a designated use which is also an existing use. Protection must also be retained for existing uses that are not designated. Both federal and Maine State regulation define “existing uses” as “those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” [40 CFR 131.3 (e); 38 MRSA 464 (4)(F)(1)].
3. Document and explain causes of any impairment to any uses.
4. Document uses that could be attained (based on the physical, chemical, biological characteristics) if the causes of any impairment were addressed. At a minimum, uses are attainable if they can be achieved by the imposition effluent limits in accordance with the technology requirements of the CWA for point sources and cost-effective and reasonable best management practices for nonpoint source control.
 - a. Include an analysis of potential alternatives to abate the impairment.
 - b. Identify the anticipated degree of use attainment and level of water quality associated with

implementation of each alternative, including spatial and temporal extent of non-attainment.

- c. Assess the technology and economic factors that affect the implementation of each alternative.

For example, a use attainability analysis for a waterbody might evaluate what aquatic life uses and dissolved oxygen concentrations are attainable through alternatives that include:

- various levels of controls on point sources,
- dam operational procedures,
- outright removal of dams,
- controls of nonpoint sources, and
- combinations of the above.

5. Provide documentation to support any determination that the goals of the existing waterbody classification are not attainable, based on one or more of the factors at 40 CFR 131.10(g) (see list on final page of this document).
 - a. State the reasons why attaining the designated use is not feasible, using the criteria listed in 40 CFR 131.10(g). Explain how the criteria non-attainment actually impacts use.
 - b. Provide the demonstration of the water quality and level of use determined to be attainable which would be the basis for any revised designated uses for the water.
6. Document results of the public participation process. Regulations require the State to provide notice and an opportunity for a public hearing prior to adding or removing any use, or establishing sub-categories of a use.
7. Recommend whether or not the current use classification for the water should remain unchanged.
8. If the recommendation is to revise uses for the water,
 - a. State the proposed reclassification: Reclassification must ensure that the *attainable* designated uses and *any* existing uses are retained.
 - b. Define spacial and temporal extent of the reclassification.
 - c. Document that Maine has taken into consideration the water quality standards of downstream waters and that any proposed revision would provide for the attainment and maintenance of the water quality of downstream waters.

Additional information and references concerning UAAs are available in Chapter 2 of EPA's Water Quality Standards Handbook, 2nd. Ed., EPA-823-B-94-005a, August, 1994.

Clean Water Act Regulations - Criteria for Removal of a Designated Use

[40 CFR 131.10 (g)]

(g) States may remove a designated use which is *not* an existing use, as defined in §131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

- (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or
- (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
- (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
- (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
- (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- (6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.